Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An apparatus comprising:

a cache ~~management logistics~~ manager to ~~control~~ manage a transfer of a trace;

a first cache coupled to the cache ~~management logistics~~ manager to evict the trace based on a replacement mechanism; and

a second cache coupled to the cache ~~management logistics~~ manager to receive the evicted trace based on a first number of accesses to the trace.

2. (currently amended) The apparatus of claim 1 wherein ~~the trace has~~ the cache manager comprises a usage counter~~, the usage counter being used~~ to count the first number of accesses to the trace.

3. (currently amended) The apparatus of claim [[2]] 1 ~~further comprising~~ wherein the cache manager comprises a comparator to compare a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

4. (previously amended) The apparatus of claim 3 wherein the trace is transferred from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

5. (previously amended) The apparatus of claim 3 wherein the trace is discarded from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

6. (currently amended) The apparatus of claim [[4]] 1 further comprising a level 2 (L2) cache to receive the trace~~, the trace being transferred to the first or second cache for~~

~~execution~~ transferred from one of the first and second caches using a second number of accesses to the trace.

7. (currently amended) The apparatus of claim 6 wherein the trace is transferred from the second cache to the L2 cache when a second threshold value is less than [[a]] the second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

8. (currently amended) The apparatus of claim [[4]] 6 wherein the trace is discarded from the second cache when a second threshold value is more than [[a]] the second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

9. (currently amended) The apparatus of claim [[8]] 6 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

10. (original) The apparatus of claim 1 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.

11. (currently amended) A method comprising:

~~controlling~~ managing a transfer of a trace;

evicting the trace based on a replacement mechanism using a first cache; and

receiving the evicted trace based on a first number of accesses to the trace using a second cache.

12. (currently amended) The method of claim 11 ~~further comprising~~ wherein managing comprises counting the first number of accesses to the trace.

13. (currently amended) The method of claim ~~12 further comprising~~ 11 wherein managing comprises comparing a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

14. (currently amended) The method of claim 13 wherein managing further ~~comprising~~ comprises transferring the trace from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

15. (currently amended) The method of claim 13 wherein managing further ~~comprising~~ comprises discarding the trace from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

16. (currently amended) The method of claim 14 wherein managing further ~~comprising~~ comprises ~~receiving~~ transferring the trace ~~by~~ from one of the first and second caches to a ~~the~~ second level (L2) cache using a second number of accesses to the trace~~, the trace being transferred to the first or second cache for execution~~.

17. (currently amended) The method of claim 16 ~~further comprising~~ wherein transferring comprises transferring the trace to the L2 cache when a second threshold value is less than a second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

18. (currently amended) The method of claim ~~14 further comprising~~ 16 wherein transferring comprises discarding the trace when a second threshold value is more than a second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

19. (currently amended) The method of claim ~~18~~ 16 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

20. (original) The method of claim 11 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.

21. (currently amended) A system comprising:

an execution unit; and

a cache unit couple to the execution unit to provide the execution unit a trace, the cache unit comprising:

a cache ~~management logistics~~ manager to ~~control~~ manage a transfer of the trace[;],

a first cache coupled to the cache ~~management logistics~~ manager to evict the ~~evicted~~ trace based on a replacement mechanism[;], and

a second cache coupled to the cache ~~management logistics~~ manager to receive the evicted trace based on a first number of accesses to the trace.

22. (currently amended) The system of claim 21 wherein the ~~trace has~~ cache manager comprises a usage counter~~, the usage counter being used~~ to count the first number of accesses to the trace.

23. (currently amended) The system of claim ~~22 further comprising~~ 21 wherein the cache manager comprises a comparator to compare a first threshold value to the first number of accesses to the trace, the first threshold value being a first fixed number or a first dynamically adjusted number.

24. (previously amended) The system of claim 23 wherein the trace is transferred from the first cache to the second cache when the first threshold value is less than the first number of accesses to the trace.

25. (previously amended) The system of claim 23 wherein the trace is discarded from the first cache when the first threshold value is more than or equal to the first number of accesses to the trace.

26. (currently amended) The system of claim 24 wherein the cache unit further ~~comprising~~ comprises a level 2 (L2) cache to receive the trace~~, the trace being transferred to the~~

~~first or second cache for execution~~ transferred from one of the first and second caches using a second number of accesses to the trace.

27. (currently amended) The system of claim 26 wherein the trace is transferred from the second cache to the L2 cache when a second threshold value is less than [[a]] the second number of accesses to the trace, the second threshold value being fixed or dynamically adjusted.

28. (currently amended) The system of claim 24 wherein the trace is discarded from the second cache when a second threshold value is more than [[a]] the second number of accesses to the trace, the second threshold value being a fixed number or a dynamically adjusted number.

29. (currently amended) The system of claim ~~28~~ 26 wherein the second number of accesses to the trace is a number of accesses to the trace counting from a time the trace first enters the first cache.

30. (original) The system of claim 21 wherein the replacement mechanism is a Least Recently Used (LRU) mechanism.